

CLAIMS

1. A non-aqueous electrolyte battery comprising

a battery device including an anode having an anode mixture containing an anode active material, and a cathode having a cathode mixture containing a cathode active material, said anode and the cathode being layered together via a separator;

a solid electrolyte including an organic high molecular material and an electrolyte salt contained therein; and

a film-shaped exterior material housing therein said battery device and the solid electrolyte; wherein

a gas adsorbing carbon material formed of a carbonaceous material having a specific surface not less than $30 \text{ m}^2/\text{g}$, said gas adsorbing carbon material being added to said anode mixture and/or said cathode mixture for adsorbing a gas evolved within the battery.

2. The non-aqueous electrolyte battery according to claim 1, wherein said gas adsorbing carbon material is said carbonaceous material composed of one or both of carbon black and activated carbon.

3. The non-aqueous electrolyte battery according to claim 1, wherein said gas adsorbing carbon material, when added to said anode mixture, is added in an amount not less than 0.1 wt% and not larger than 6 wt% of the total weight of the anode mixture.

4. The non-aqueous electrolyte battery according to claim 2, wherein, in case

activated carbon is added as said carbonaceous material to said cathode mixture, said gas adsorbing carbon material is added in an amount not less than 0.2 wt% and not larger than 8 wt% of the total weight of the cathode mixture.

5. The non-aqueous electrolyte battery according to claim 2, wherein, in case carbon black is added as said carbonaceous material to said cathode mixture, said gas adsorbing carbon material is added in an amount not less than 0.2 wt% and not larger than 4 wt% of the total weight of the cathode mixture.

6. The non-aqueous electrolyte battery according to claim 1, wherein said film-shaped exterior material is a laminate film composed of at least one layer each of a metal layer and a resin layer.

7. The non-aqueous electrolyte battery according to claim 1, wherein said solid electrolyte is a gel electrolyte including a non-aqueous solvent, contained in said organic high polymer material, in addition to said electrolyte salt.

8. A non-aqueous electrolyte battery comprising

a battery device including an anode having an anode mixture layer containing an anode active material on an anode current collector, said anode having an exposed anode current collector portion exposing said anode current collector, and a cathode including a cathode mixture layer containing a cathode active material on a cathode current collector, said cathode having an exposed cathode current collector portion exposing said cathode current collector, said anode and the cathode being layered together via a separator;

a solid electrolyte including an organic high molecular material and an electrolyte salt contained therein;

a gas adsorbing carbon layer containing a gas adsorbing carbon material formed of a carbonaceous material with specific surface not less than 30 m²/g, for adsorbing a gas evolved within the battery; and

a film-shaped exterior material housing therein said battery device, said solid electrolyte and the gas adsorbing carbon layer;

said gas adsorbing carbon layer being provided to said exposed anode current collector portion and/or the exposed cathode current collector portion.

9. The non-aqueous electrolyte battery according to claim 8, wherein said gas adsorbing carbon layer contains a gas adsorbing carbon material composed of one or both of carbon black and activated carbon.

10. The non-aqueous electrolyte battery according to claim 8, wherein said film-shaped exterior material is a laminate film composed of at least one layer each of a metal layer and a resin layer.

11. The non-aqueous electrolyte battery according to claim 8, wherein said non-aqueous electrolyte is a gel electrolyte including a non-aqueous solvent, contained in said organic high polymer material, in addition to said electrolyte salt.

12. A non-aqueous electrolyte battery comprising

a battery device including an anode having an anode mixture containing an anode active material, and a cathode having a cathode mixture containing a cathode

active material, said anode and the cathode being layered together via a separator;

a solid electrolyte including an organic high molecular material and an electrolyte salt contained therein;

a gas adsorbing carbon layer containing a gas adsorbing carbon material composed of a carbonaceous material with a specific surface not less than $30 \text{ m}^2/\text{g}$, for adsorbing a gas evolved in the battery; and

a film-shaped exterior material housing therein said battery device, said non-aqueous electrolyte and the gas adsorbing carbon layer;

said gas adsorbing carbon layer being provided to an inner surface of said film-shaped exterior material facing said battery device.

13. The non-aqueous electrolyte battery according to claim 12, wherein said gas adsorbing carbon layer includes one or both of carbon black and activated carbon.

14. The non-aqueous electrolyte battery according to claim 12, wherein said film-shaped exterior material is a laminate film composed of at least one layer each of a metal layer and a resin layer.

15. The non-aqueous electrolyte battery according to claim 12, wherein said solid electrolyte is a gel electrolyte including a non-aqueous solvent, contained in said organic high polymer material, in addition to said electrolyte salt.